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EXAMINER	
PRENDERGAST, ROBERTA D	

ART UNIT	PAPER NUMBER
2628	

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/805,991	SAKAMOTO ET AL.	
	Examiner	Art Unit	
	Roberta Prendergast	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *8,15,16,20,28,35,36,40,45,52,63,64,66,68,70 and 72* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *15,16,20,35,36,40,45,52,70 and 72* is/are allowed.

6)☒ Claim(s) *8,28,63,64,66 and 68* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 March 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/18/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Art Unit Designation has changed from 2671 to 2628

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 11/18/2005 has been entered.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "S104" has been used to designate steps S104-S106 and step S105 has been used to designate step S107 in Fig. 12, see paragraphs [0112]-[0115].

The drawings are further objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

Fig. 34, element 338 is used to indicate element 348 in the specification, see paragraph [0176]; Fig. 36, element 5 is used to indicate element 6 in the spec, see paragraph [0186]; Fig. 42, element S617; Fig. 44, element S6162 is not mentioned; Fig. 50, elements 403-406 are either missing or are used to indicate an incorrect portion of the figure, see paragraph [0245], Fig. 58, element 40 is used to indicate element 45, see paragraph [0286].

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 63, 64, and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okude et al. U.S. Patent No. 6175802 in view of Yoshida U.S. Patent No. 5699056.

Referring to claims 63, 64, and 66, Okude et al. teaches a map display device for converting externally provided communications information into an applicable object model for arrangement on a map image, said map display device comprising: an input part for receiving an instruction from a user (Fig. 1 (elements 1-4 & 1-5); column 4, lines 62-67); a map data storage part for storing map data (Fig. 1 (element 1-3); column 4, lines 53-61); an object model display information storage part for storing object model display information for displaying at least one object model having a shape which allows the user to understand content of the communications information on the map image (Fig. 5 (elements 3-7, data read unit) & 19 (elements 19-1 & 19-2); column 7, lines 26-37); a communications part for receiving the communications information, the communications information including information which varies in real time (Fig. 1 (elements 1-7 thru 1-11) & 5 (element 3-5), i.e. the current location detection unit indicates information which varies in real time; column 5, lines 1-15) wherein the communication information includes a traffic information receiver, which receives

information regarding traffic congestion, road construction or road closures (claim 63), available parking, etc (column 5, lines 15-25); a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part and arranging the at least one object model at a position on the map image based on the communications information (Figs. 1 (element 1-1), 3, 5 & 19; columns 5-6, lines 50-19; columns 6-7, lines 55-8, i.e. the operation and processing unit is understood to be the map data arranging unit); and a display part for displaying a result map image including the map image and the at least one object model obtained by said map data arranging part (Figs. 1 (element 1-2) & 24 (element 24-5); column 4, lines 45-53) but does not specifically teach wherein said map data arranging part arranges the at least one object model representing construction in a region of the image map corresponding to the road under construction upon receipt of traffic information regarding road construction (claim 63), wherein said map data arranging part arranges a plurality of object models representing construction workers in the region of the image map corresponding to the road under construction (claim 64), the communications information includes accident information indicating a site of an accident, and said map data arranging part arranges the at least one object model representing a traffic accident in a region of the image map corresponding to the site of the accident (claim 66).

Yoshida teaches wherein the communications information includes information indicating a road, said map data arranging part arranges the at least one object model

representing a road under construction in a region of the image map corresponding to the road under construction (Figs. 71-72; column 40, lines 50-60, i.e. it is understood that the traffic information extracted from the telegraphic messages for each area is the communications information, which is being displayed in the region of the map corresponding to the traffic incident being reported, such as a traffic jam, or road closures due to an accident or road construction), the communications information includes accident information indicating a site of an accident, and said map data arranging part arranges the at least one object model representing a traffic accident in a region of the image map corresponding to the site of the accident, as claimed in claim 66 (Figs. 3 (element 31B), 62, & 68; column 5, lines 35-45; column 41, lines 9-24, i.e. it is understood that the accident information extracted from the telegraphic messages for each area is the communications information, which is being displayed in the region of the map corresponding to the accident).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the map display device of Okude et al. to include the teachings of Yoshida thereby improving the traveling experience by supplying accurate traffic, accident, and weather information in real time so that the user can avoid trouble spots (Yoshida, Abstract; column 1, lines 9-15) and thus allowing the map display device to calculate and display the best fitted route to the user's destination (Okude et al.: column 4, lines 30-45).

Claims 8 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okude et al. U.S. Patent No. 6175802 in view of Ito U.S. Patent No. 6256578.

Referring to claim 8, Okude et al. teaches a map display device for converting externally provided communications information into an applicable object model for arrangement on a map image, said map display device comprising: an input part for receiving an instruction from a user (Fig. 1 (elements 1-4 & 1-5); column 4, lines 62-67); a map data storage part for storing map data (Fig. 1 (element 1-3); column 4, lines 53-61); an object model display information storage part for storing object model display information for displaying at least one object model having a shape which allows the user to understand content of the communications information on the map image (Fig. 5 (elements 3-7, data read unit) & 19 (elements 19-1 & 19-2); column 7, lines 26-37); a communications part for receiving the communications information, the communications information including information which varies in real time (Fig. 1 (elements 1-7 thru 1-11) & 5 (element 3-5), i.e. the current location detection unit indicates information which varies in real time; column 5, lines 1-15); a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part and arranging the at least one object model at a position on the map image based on the communications information (Figs. 1 (element 1-1), 3, 5 & 19; columns 5-6, lines 50-19; columns 6-7, lines 55-8, i.e. the operation and processing unit is understood to be the map data arranging unit); and a display part for displaying a resultant map image including the map image and the at least one object model obtained by said map data

arranging part (Figs. 1 (element 1-2) & 24 (element 24-5); column 4, lines 45-53) wherein the object model display information comprises; information about the shape of the at least one object model; and information about behavior in time and space of the at least one object model (Fig. 3-5, 23B; column 4, lines 30-52; column 5, lines 1-25; columns 5-6, lines 50-3; column 6, lines 4-25; column 7, lines 9-23 and 37-49; column 14, lines 40-66, i.e. the object model display information comprises the vehicles current location, the trajectory of the vehicle based on the direction and speed of travel, and the vehicle shape to be displayed based on the view point's height or distance fro the vehicle and the viewpoint is updated/renewed as the vehicle moves indicating behavior information in time and space of the moving vehicle) but does not specifically teach wherein the information about behavior in time and space of the at least one object model is described in an object-oriented interpreter language not needing compilation.

Ito teaches wherein the information about behavior in time and space of the at least one object model is described in an object-oriented interpreter language not needing compilation (Figs. 3 and 4; column 3, lines 16-21; columns 4-5, lines 47-10; columns 5-6, lines 64-11; column 6, lines 14-31 and 52-67, i.e. the JAVA virtual machine interprets the navigational program, which is written in a general-purpose JAVA language and extended JAVA APIs intervene between the navigational class library and the navigation program API, the navigation system generates an API for map display for the current position that includes the current position and area to be displayed, the orientation, map scaling and a road map with peripheral traffic information is displayed as appropriate to show the current position).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the map display device of Okude et al. to include the teachings of Ito thereby allowing a common extended program to run on the different platform types used for discrete navigation systems (column 2, lines 47-65) thus allowing the telecommunications infrastructure to distribute only one, common, car-oriented multimedia program to individual cars having different types of hardware (column 7, lines 40-50).

Referring to claim 28, Okude et al. teaches cited prior art does not teach a navigation device for converting externally provided communications information into an applicable object model for arrangement on a map image, and providing guidance to a destination, said navigation device comprising: an input part for receiving an instruction from a user (Fig. 1 (elements 1-4 & 1-5); column 4, lines 62-67); a position detection part for detecting a current position (Figs. 3(element 3-5), 5(element 3-5), 7(element 7100)); a map data storage part for storing map data (Fig. 1 (element 1-3); column 4, lines 53-61); an object model display information storage part for storing object model display information for displaying at least one object model having a shape which allows the user to understand content of the communications information on the map image (Fig. 5 (elements 3-7, data read unit) & 19 (elements 19-1 & 19-2); column 7, lines 26-37); a route selection part for selecting a route to the destination based on the instruction provided by said input part, the current position detected by said position detection part, and the map data stored in said map data storage part (Fig. 3(element 3-2 and 3-3); column 6, lines 29-44); a communications part for receiving the

communications information, the communications information including information which varies in real time (Fig. 1 (elements 1-7 thru 1-11) & 5 (element 3-5), i.e. the current location detection unit indicates information which varies in real time; column 5, lines 1-15); a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part and arranging the at least one object model at a position on the map image based on the communications information (Figs. 1 (element 1-1), 3, 5 & 19; columns 5-6, lines 50-19; columns 6-7, lines 55-8, i.e. the operation and processing unit is understood to be the map data arranging unit); a guiding part for providing the guidance to the destination in response to the communications information received by said communications part, the route selected by said route selection part, the current position detected by said position detection part, and the map data provided by said map data storage part and outputting a resultant map image including the map image and the at least one object model obtained by said map data arranging part (Figs. 3(elements 3-4 through 3-8), 4, 9, and 23B; column 6, lines 19-25 and 45-55); and a display part for displaying a resultant map image including the map image and the at least one object model obtained by said map data arranging part (Figs. 1 (element 1-2) & 24 (element 24-5); column 4, lines 45-53) wherein the object model display information comprises; information about the shape of the at least one object model; and information about behavior in time and space of the at least one object model (Fig. 3-5, 23B; column 4, lines 30-52; column 5, lines 1-25; columns 5-6, lines 50-3; column 6, lines 4-25; column 7, lines 9-23 and 37-49; column

14, lines 40-66, i.e. the object model display information comprises the vehicles current location, the trajectory of the vehicle based on the direction and speed of travel, and the vehicle shape to be displayed based on the view point's height or distance fro the vehicle and the viewpoint is updated/renewed as the vehicle moves indicating behavior information in time and space of the moving vehicle) but does not specifically teach wherein the information about behavior in time and space of the at least one object model is described in an object-oriented interpreter language not needing compilation.

Ito teaches wherein the information about behavior in time and space of the at least one object model is described in an object-oriented interpreter language not needing compilation (Figs. 3 and 4; column 3, lines 16-21; columns 4-5, lines 47-10; columns 5-6, lines 64-11; column 6, lines 14-31 and 52-67, i.e. the JAVA virtual machine interprets the navigational program, which is written in a general-purpose JAVA language and extended JAVA APIs intervene between the navigational class library and the navigation program API, the navigation system generates an API for map display for the current position that includes the current position and area to be displayed, the orientation, map scaling and a road map with peripheral traffic information is displayed as appropriate to show the current position).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the map display device of Okude et al. to include the teachings of Ito thereby allowing a common extended program to run on the different platform types used for discrete navigation systems (column 2, lines 47-65) thus allowing the telecommunications infrastructure to distribute only one, common, car-

oriented multimedia program to individual cars having different types of hardware (column 7, lines 40-50).

Claim 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okude et al. U.S. Patent No. 6175802 in view of Kakihara et al. U.S. Patent No. 5293163.

Referring to claim 68, Okude et al. teaches a map display device for converting externally provided communications information into an applicable object model for arrangement on a map image, said map display device comprising: an input part for receiving an instruction from a user (Fig. 1 (elements 1-4 & 1-5); column 4, lines 62-67); a map data storage part for storing map data (Fig. 1 (element 1-3); column 4, lines 53-61); an object model display information storage part for storing object model display information for displaying at least one object model having a shape which allows the user to understand content of the communications information on the map image (Fig. 5 (elements 3-7, data read unit) & 19 (elements 19-1 & 19-2); column 7, lines 26-37); a communications part for receiving the communications information, the communications information including information which varies in real time (Fig. 1 (elements 1-7 thru 1-11) & 5 (element 3-5), i.e. the current location detection unit indicates information which varies in real time; column 5, lines 1-15) wherein the communication information includes a traffic information receiver, which receives information regarding traffic congestion, road construction or road closures (claim 63), available parking, etc (column 5, lines 15-25); a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information

provided by said object model display information storage part and arranging the at least one object model at a position on the map image based on the communications information (Figs. 1 (element 1-1), 3, 5 & 19; columns 5-6, lines 50-19; columns 6-7, lines 55-8, i.e. the operation and processing unit is understood to be the map data arranging unit); and a display part for displaying a result map image including the map image and the at least one object model obtained by said map data arranging part (Figs. 1 (element 1-2) & 24 (element 24-5); column 4, lines 45-53) but does not specifically teach wherein the communications information includes information indicating availability of a specific parking lot, said map data arranging part arranges the at least one object model representing the availability in a region of the map image corresponding to the specific parking lot and said map data arranging part arranges a plurality of vehicles in the region of the map image corresponding to the specific parking lot.

Kakihara et al. teaches wherein the communications information includes information indicating availability of a specific parking lot, said map data arranging part arranges the at least one object model representing the availability in a region of the map image corresponding to the specific parking lot (Fig. 20; column 13, lines 1-17).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the map display device of Okude et al. to include the teachings of Kakihara et al. thereby allowing the road information required for driving to be displayed on the screen and hence notified directly to the driver without reducing the visibility of the information displayed on the screen of a displaying device

and further reducing the amount of time required for searching for a parking space (Kakihara et al. column 1, lines 45-51).

Allowable Subject Matter

Claims 15, 16, 20, 35, 36, 40, 45, 52, 70, and 72 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claim 15, cited prior art does not teach a map display device for converting externally provided communications information into an applicable object model for arrangement on a map image comprising: an input part for receiving an instruction from a user; a map data storage part for storing map data; an object model display information storage part for storing object model display information for displaying at least one object model having a shape which allows the user to understand content of the communications information on the map image; a communications part for receiving the communications information, the communications information including information which varies in real time; a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part, and arranging the at least one object model at a position on the map image based on the communications information; a display part for displaying a resultant map image including the map image and the at least one object model obtained by said map data arranging part; and a time information storage part for storing time information corresponding to a position of a mobile unit which moves

according to a schedule on a predetermined route, wherein the map data arranging part refers to the time information to create the at least one object model to correspond to the mobile unit for arrangement on the map image.

Claim 16 is allowed because it depends on claim 15.

Regarding claim 20, cited prior art does not teach a map display device for converting externally provided communications information into an applicable object model for arrangement on a map image comprising: an input part for receiving an instruction from a user; a map data storage part for storing map data; an object model display information storage part for storing object model display information for displaying at least one object model having a shape which allows the user to understand content of the communications information on the map image; a communications part for receiving the communications information, the communications information including information which varies in real time; a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part, and arranging the at least one object model at a position on the map image based on the communications information; a display part for displaying a resultant map image including the map image and the at least one object model obtained by said map data arranging part; and a ticket information storage part for storing ticket information corresponding to a ticket used for paying a fare for a predetermined chargeable section, wherein said map data arranging part generates the ticket information stored in said ticket information storage part when the ticket is

purchased, the ticket information includes information about an expiration date of the ticket, and said map data arranging part refers to the information about the expiration date of the ticket, and if the expiration date is approaching, creates a message for display on said display part.

Regarding claim 35, cited prior art does not teach a navigation device for converting externally provided communications information into an applicable object model for arrangement on a map image, and providing guidance to a destination, said navigation device comprising: an input part for receiving an instruction from a user; a position detection part for detecting a current position; a map data storage part for storing map data; an object model display information storage part for storing object model display information for displaying at least one object model having a shape which allows the user to understand content of the communications information on the map image; a route selection part for selecting a route to the destination based on the instruction provided by said input part, the current position detected by said position detection part, and the map data stored in said map data storage part; a communications part for receiving the communications information, the communications information including information which varies in real time; a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part, and arranging the at least one object model at a position on the map image based on the communications information; a guiding part for providing the guidance to the destination in response to the communications information received

by said communications part, the route selected by said route selection part, the current position detected by said position detection part, and the map data provided by said map data storage part and outputting a resultant map image including the map image and the at least one object model obtained by said map data arranging part; a display part for displaying a resultant map image including the map image and the at least one object model obtained by said map data arranging part; a time information storage part for storing time information corresponding to a position of a mobile unit which moves according to a schedule on a predetermined route, wherein said map data arranging part refers to the time information to create the at least one object model to correspond to the mobile unit for arrangement on the map image.

Claim 36 is allowed because it depends on claim 35.

Regarding claim 40, cited prior art does not teach a navigation device for converting externally provided communications information into an applicable object model for arrangement on a map image, and providing guidance to a destination, said navigation device comprising: an input part for receiving an instruction from a user; a position detection part for detecting a current position; a map data storage part for storing map data; an object model display information storage part for storing object model display information for displaying at least one object model having a shape which allows the user to understand content of the communications information on the map image; a route selection part for selecting a route to the destination based on the instruction provided by said input part, the current position detected by said position detection part, and the map data stored in said map data storage part; a

communications part for receiving the communications information, the communications information including information which varies in real time; a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part, and arranging the at least one object model at a position on the map image based on the communications information; a guiding part for providing the guidance to the destination in response to the communications information received by said communications part, the route selected by said route selection part, the current position detected by said position detection part, and the map data provided by said map data storage part and outputting a resultant map image including the map image and the at least one object model obtained by said map data arranging part; a display part for displaying a resultant map image including the map image and the at least one object model obtained by said map data arranging part; and a ticket information storage part for storing ticket information corresponding to a ticket used for paying a fare for a predetermined chargeable section, wherein said guiding part generates the ticket information stored in said ticket information storage part when the ticket is purchased, the ticket information includes information about an expiration date of the ticket, and said map data arranging part refers to the information about the expiration date of the ticket, and if the expiration date is approaching, creates a message for display on said display part.

Regarding claim 45, cited prior art does not teach a navigation device for converting externally provided communications information into an applicable object

model for arrangement on a map image, and providing guidance to a destination, said navigation device comprising: an input part for receiving an instruction from a user; a position detection part for detecting a current position; a map data storage part for storing map data; an object model display information storage part for storing object model display information for displaying at least one object model having a shape which allows the user to understand content of the communications information on the map image; a route selection part for selecting a route to the destination based on the instruction provided by said input part, the current position detected by said position detection part, and the map data stored in said map data storage part; a communications part for receiving the communications information, the communications information including information which varies in real time; a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part, and arranging the at least one object model at a position on the map image based on the communications information; a guiding part for providing the guidance to the destination in response to the communications information received by said communications part, the route selected by said route selection part, the current position detected by said position detection part, and the map data provided by said map data storage part and outputting a resultant map image including the map image and the at least one object model obtained by said map data arranging part; and a display part for displaying the resultant map image outputted from said guiding part, wherein said communications part receives the communications information including

position information about any available vehicles moving according to a schedule on predetermined routes, and when the user desires to take one of the available vehicles, transmits selected vehicle information including information for specifying which of the available vehicles the user desires to take, said guiding part generates the selected vehicle information when the user desires to take one of the available vehicles, and said guiding part compares, at least, the predetermined routes on which the available vehicles move with the route to the destination selected by said route selection part, and determines whether the available vehicles are appropriate.

Regarding claim 52, cited prior art does not teach a map display method for converting externally provided communications information into an applicable object model for arrangement on a map image comprising an input process of receiving an instruction from a user; a communications process of receiving the communications information, the communication information including information which varies in real time; a map data arranging process of creating at least one object model having a shape which allows the user to understand content of the communications information by interpreting the communications information and corresponding object model display information for displaying the at least one object model at a position on the map image based on the communications information; and a display process of displaying a resultant map image including the map image and the at least one object model obtained in said map data arranging process, wherein said map data arranging process comprises creating the at least one object model corresponding to a mobile unit for

arrangement on the map image by referring to time information corresponding to a position of the mobile unit moving on a predetermined route according to a schedule.

Regarding claim 70, cited prior art does not teach a map display device for converting externally provided communications information into an applicable object model for arrangement on a map image comprising: an input part for receiving an instruction from a user; a map data storage part for storing map data; an object model display information storage part for storing object model display information for displaying at least one object model having a shape which allows the user to understand content of the communications information on the map image; a communications part for receiving the communications information, the communications information including information which varies in real time; a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part, and arranging the at least one object model at a position on the map image based on the communications information; a display part for displaying a resultant map image including the map image and the at least one object model obtained by said map data arranging part; and a ticket information storage part for storing ticket information corresponding to a ticket used for paying a fare for a predetermined chargeable section, wherein said map data arranging part generates the ticket information stored in said ticket information storage part when the ticket is purchased, and said map data arranging part changes the communications information based on the ticket information.

Regarding claim 72, cited prior art does not teach a navigation device for converting externally provided communications information into an applicable object model for arrangement on a map image, and providing guidance to a destination, said navigation device comprising: an input part for receiving an instruction from a user; a position detection part for detecting a current position; a map data storage part for storing map data; an object model display information storage part for storing object model display information for displaying at least one object model having a shape which allows the user to understand content of the communications information on the map image; a route selection part for selecting a route to the destination based on the instruction provided by said input part, the current position detected by said position detection part, and the map data stored in said map data storage part; a communications part for receiving the communications information, the communications information including information which varies in real time; a map data arranging part for creating the at least one object model by interpreting the communications information and the object model display information provided by said object model display information storage part, and arranging the at least one object model at a position on the map image based on the communications information; a guiding part for providing the guidance to the destination in response to the communications information received by said communications part, the route selected by said route selection part, the current position detected by said position detection part, and the map data provided by said map data storage part and outputting a resultant map image including the map image and the at least one object model obtained by said map data arranging part; a display

part for displaying the resultant map image outputted from said guiding part; and a ticket information storage part for storing ticket information corresponding to a ticket used for paying a fare for a predetermined chargeable section, wherein said map data arranging part generates the ticket information stored in said ticket information storage part when the ticket is purchased, wherein said guiding part generates the ticket information stored in said ticket information storage part when the ticket is purchased, and said guiding part changes the communications information based on the ticket information.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following U.S. Patents are cited to further show the state of the art with respect to vehicle navigation systems displaying traffic, road, and parking conditions.

Martin et al. U.S. Patent No. 5272638

Schreder U.S. Patent No. 5504482

Iwamura et al. U.S. Patent No. 5602564

Kinoshita et al. U.S. Patent No. 5642093

Kersken et al. U.S. Patent No. 5748107

Nagai U.S. Patent No. 5826212

Rosenquist U.S. Patent No. 5864305

Golding U.S. Patent No. 5933100

Iwamura et al. U.S. Patent No. 5945976

Alexander, Jr. U.S. Patent No. 6083353

Gershman et al. U.S. Patent No. 6199099

Sowizral et al. U.S. Patent No. 6570564

Merrill et al. U.S. Patent Application No. 20020008703

The following non-patent literature is cited to further show the state of the art with respect to vehicle navigation systems displaying traffic, road, and parking conditions and interpreter programs.

Sowizral et al., "The Java 3D API and virtual reality", IEEE Computer Graphics and Applications, Volume 19, Issue 3, May-June 1999, pages 12-15.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta Prendergast whose telephone number is (571) 272-7647. The examiner can normally be reached on M-F 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571) 272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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RP 4/11/2006

Kee M. Tung
Primary Examiner